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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Shinya Kadono

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7590

08/02/2010

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EXAMINER

BOCURE, TESFALDET

ART UNIT

PAPER NUMBER

2611

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/569,871	Applicant(s) KADONO ET AL.	
	Examiner Tesfaldet Bocure	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-36 is/are allowed.
- 6) ☒ Claim(s) 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/28/06, 9/21/07 & 5/1/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 27-37 are pending in this Application.
2. Examiner decision not to make a restriction for this case between the claimed encoding the quantization matrix and decoding quantization matrix is that the case is an old case and deserve to have and expedite prosecution which is in line with the USPTO's policy.

Information Disclosure Statement

3. The Information Disclosure Statement (IDS) submitted on 2/28/06 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
4. As to the Information Disclosure Statements (IDSs) received on 9/21/07 and 5/1/09 have been considered in-part because: there is no English translation to the cited Chinese patent applications and there is no copy for cited non-patent publication, "General Image Compression---: in the IDS received 9/21/07; and there is no copy for cited non-patent publication, " for General Image Compression---;" in the IDS received on 5/1/09.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The claimed invention is directed to non-statutory subject matter because the claimed "computer readable recording medium" claimed in claim 37 is not clearly disclosed in the specification as to what the medium is referring to and under Broad and Reasonable interpretation (BIR) the claimed medium includes a transitory subject matter such as signal which is non-statutory.

6. Examiner would like to advice Applicant either in the specification to define what the medium is or amend the claim read as "recording medium" so that to read as disclosed and shown in figures 13a-13c in order to over the 101 rejection.

Allowable Subject Matter

7. Claims 27-36 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter: the claimed subject matter in claims 27-36 are allowable¹ because the arts of record fail to teach or fairly suggest the claimed as shown and disclosed in figures 4 and 11 respectively to the claims encoding and decoding:

a. "A method for coding a quantization matrix in which each component takes a value ranging from 1 to 255, said method comprising in combinations with: calculating a difference value between a value of an I-th component and a value of an (I-1)th component in the quantization matrix; determining an offset

¹ The test whether the claimed subject matter in claims 27-36 is statutory or non-statutory is based on at least the claims require an encoder and decoder for encoding and decoding the quantization metrics and shown in figures 4 and 11 respectively for the encoder and decoder; the encoder and decoder impose a meaningful limit and involve more than insignificant extra solution activity in the claims, encoding and decoding a quantization metrics.

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value as +256 when the difference value is smaller than -128; determining the offset value as -256 when the difference value is equal to or greater than +128; adding a determined offset value and the difference value; and coding a result of said adding,” as in claim 27.

b. “A method for decoding a coded quantization matrix, said method comprising in combinations with:
decoding a coded stream into a difference value ranging from -128 to +127;
adding together a value of an (I-1)th component in the quantization matrix, the difference value, and 256; and
calculating a remainder by dividing the result of said adding by 2 raised to 8-th power to obtain the value of an I-th component.

c. “ A coding apparatus which codes a quantization matrix in which each component takes a value ranging from 1 to 255, said apparatus comprising in combinations with: a subtraction unit operable to calculate a difference value between a value of an I-th component and a value of an (I-1)th component in the quantization matrix; an offset value determination unit operable to determine an offset value as +256 when the difference value is smaller than -128, and to determine the offset value as -256 when the difference value is equal to or greater than +128; an addition

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unit operable to add the offset value and the difference value; and a coding unit operable to code a result of said adding,” as in claim 33.

d. “An apparatus for decoding a coded quantization matrix, said apparatus comprising in combinations with: a decoding unit operable to decode a coded stream into a difference value ranging from -128 to +127; an addition unit operable to add together a value of an (I-1)th component in the quantization matrix, the difference value, and 256; and a calculation unit operable to calculate a remainder by dividing a result of said adding by 2 raised to 8-th power to obtain the value of the I-th component,” as in claim 34.

e. “An integrated circuit for use in a decoding apparatus which decodes a coded quantization matrix, said integrated circuit comprising in combinations with: an operation unit operable to: decode a coded stream into a difference value ranging from -128 to +127; add together a value of an (I-1)th component in the quantization matrix, the difference value, and 256; and calculate a remainder by dividing a result of said adding by 2 raised to 8-th power to obtain the value of an I-th component which is an integer equal to or smaller than 255,” as in claim 35.

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f. " A program, which is used in a computer, for decoding a moving picture, said program causing a computer to execute steps for decoding a coded quantization matrix, wherein said steps include in combinations with:
decoding a coded stream into a difference value ranging from -128 to +127;
adding together a value of an (I-1)th component in the quantization matrix, the difference value, and 256; and calculating a remainder by dividing a result of said adding by 2 raised to 8-th power
to obtain the value of an I-th component which is an integer equal to or smaller than 255" as in claim 36.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

g. US patent numbers 5,515,105 and 6,445,739 issued to Lim and Chen et al. respectively disclose a quantization metric generator.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tesfaldet Bocure whose telephone number is (571) 272-3015. The examiner can normally be reached on Mon-Thur (8:00a-5:30p) & Mon.-Fri (8:00a-5:30p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed H. Ghayour can be reached on (571) 272-3021. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tsfaldet Bocure/
Primary Examiner, Art Unit 2611

/T. B./
Primary Examiner, Art Unit 2611

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